

Information Technology Services - Medicine

Monthly Report

June 1997

Highlights and milestones

- For the first time since its creation in June 1995, use of the Medical Center Web server decreased this month.
- The network link from the School to the main campus, known as Medlink, was upgraded from 10MBits/second to 200MBits/second.
- Mike Cicarella accepted a position with Technology Operations Production Systems management starting August 11.
- Technology Evaluation and Planning, Desktop Computer Support and Yale Telecommunications completed process re-engineering of the client network order process.
- Technology Evaluation and Planning completed the Dynamic Host Configuration Protocol implementation.
- The Help Desk began accepting electronic mail requests for help via a new Help Desk email account.
- Administrative Systems has created the Patient Inquiry Database to support OPS in their resolution of patient-related inquiries and problems. It is a Web-based application with Oracle as the backend database.
- The Grants & Contracts Reporting system, a new CRS-like application, goes into beta testing this month. It was created in conjunction with Administrative Systems and will provide on-line reporting on Grant & Contract information as well as ad-hoc access to the grant data in the next phase.
- Use of the Core Biomedical Collection, Current Contents, and HealthSTAR have increased significantly faster than other resources since last year.
- The Help Desk was more heavily used in June than in May, receiving 10% more calls from 7% more clients.
- More calls to the Help Desk were resolved the same day they were received this month in every category except electronic mail and scheduling software. Next-day resolution of those calls decreased by 4%.
- There were large increases from May to June in the number of Help Desk calls for new services (46%) and work order status inquiries (51%).
- The number of requests for new connections to the campus network decreased by half (from 80 to 41) from May to June.
- Public workstation usage increased from last year in both the Library (25%) and the Hospital (29%).

Information Technology-Medicine Monthly Report

June 1997

Applications

<u>Type of application</u>	<u>this month</u>	<u>Jun-96</u>	<u>% change</u>
CINAHL	357	196	82%
Core Biomedical Collection	1,143	396	189%
Clinical Reporting System (CRS)	551	485	14%
accesses per user per month	8	10	-23%
Current Contents	3173*	454	296%
Electronic mail (# messages sent)	364,215	315,220	16%
messages per user per day	2.4	2	-
HealthSTAR	349	113	209%
Medline	15,948	12,549	27%
searches per active user per month	6.4	-	-
Medical Center World Wide Web			
Medical Center home page	43,881	6,703	555%
Hospital home page	1,662	675	146%
School of Medicine home page	9,349	3,442	172%
Medical Library home page	14,102	5,917	138%

*As of 8/96, Current Contents usage includes automatic searches

Background information

Personal computers as of 11/96	2,200	7,000
Electronic mail users as of 6/96	1,000	4,089
Networked computers as of 3/97	1,575	3,625
Full-time faculty, 1996-97	-	1,370
Medical & graduate students, 1996-97	-	1,155
Residents & postdocs, 1996-97	440	1,090
Full-time staff, 1996-97	3,625	2,230
Nursing staff, 1996-97	1,312	-
Number of beds, 1996-97	900	-

Schools of Hospital Medicine & Nursing

System outages

none

Help Desk

	change from		<u>Type of call</u>	# of calls change from		resolved by Help Desk change from		resolved next day change from	
	<u>this month</u>	<u>last month</u>		<u>this month</u>	<u>last month</u>	<u>this month</u>	<u>last month</u>	<u>this month</u>	<u>last month</u>
Total calls	2776	10%	New order	510	46%	49%	4%	64%	8%
Calls per day	132	10%	PC/printer	436	3%	60%	2%	88%	10%
% of ITS-Med clients using Help Desk	27%	4%	Network	388	14%	78%	4%	89%	10%
# of callers	1033	7%	Transfer	294	-6%	100%	1%	100%	1%
# of Yale affiliates using Web page	484	-2%	Info	241	-10%	100%	1%	97%	3%
# of new network connects	41	-49%	Email/Schedulin	235	-11%	89%	-3%	88%	-4%
Departments accounting for 5% or more of all calls	Internal Medicine		Status queries	226	51%	98%	3%	98%	3%
	Surgery		Billing	82	14%	86%	6%	73%	22%
	Pediatrics		Admin systems	58	-37%	78%	18%	84%	5%

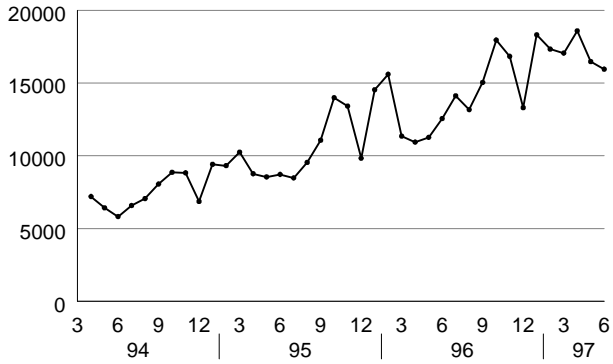
NetMenu workstations

<u>Type of application</u>	Library NetMenu # of connections			Hospital NetMenu # of connections			Nursing NetMenu # of connections		
	<u>this month</u>	<u>Jun-96</u>	<u>% change</u>	<u>this month</u>	<u>Jun-96</u>	<u>% change</u>	<u>this month</u>	<u>Jun-96</u>	<u>% change</u>
Medical Education	741	644	15%	-	-	-	-	-	-
Bibliographic databases & search tools	6,908	7,071	-2%	1,244	1128	10%	27	60	-55%
Full text & factual databases	276	298	-7%	2,098	1825	15%	0	2	-100%
Grant & research information	9	29	-69%	-	-	-	3	0	-
Clinical assistance	1	18	-94%	36	55	-35%	0	0	-
Email/news/networks	19,874	14,264	39%	9,173	6228	47%	2	174	-99%
Word processing & utilities	401	268	50%	1,546	1193	30%	-	-	-
Hospital information systems	-	-	-	23,956	19172	25%	-	-	-
Procedure recorders	-	-	-	402	322	25%	-	-	-
Total	28,210	22,592	25%	38,455	29,923	29%	32	236	-86%
connections per workstation	1,085	1,076	1%	385	416	-7%	16	118	

Institutional Resource Usage

MEDLINE

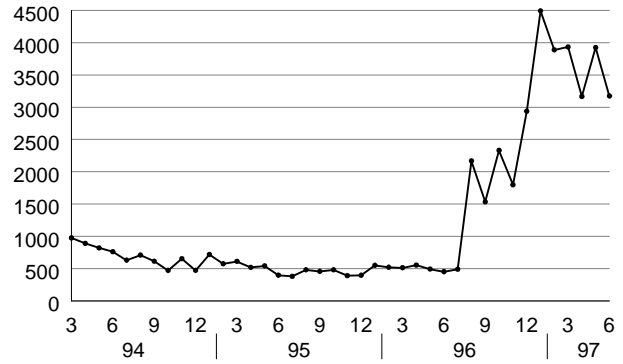
number of sessions per month



source: MEDLINE usage data

Current Contents

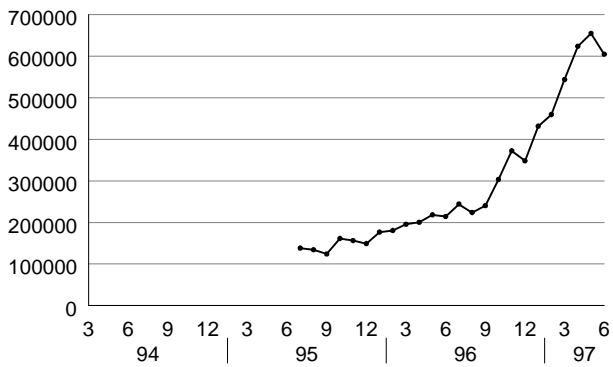
number of connections per month



source: Current Contents usage data

Medical Center Web server

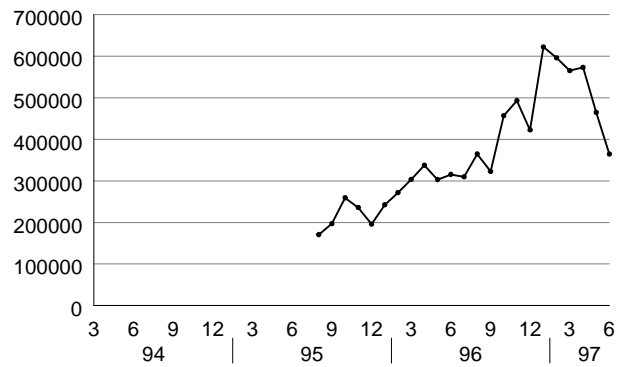
number of pages per month



source: WEB usage data

Electronic mail

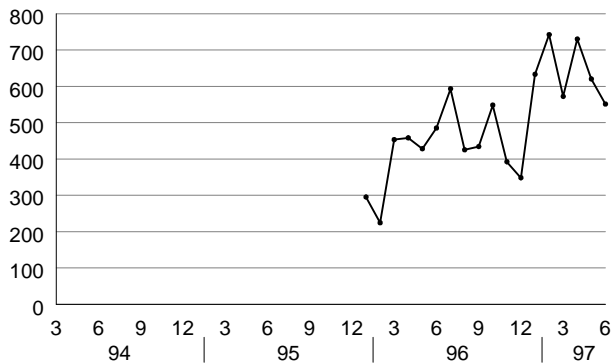
number of messages per month



source: PMDF usage data

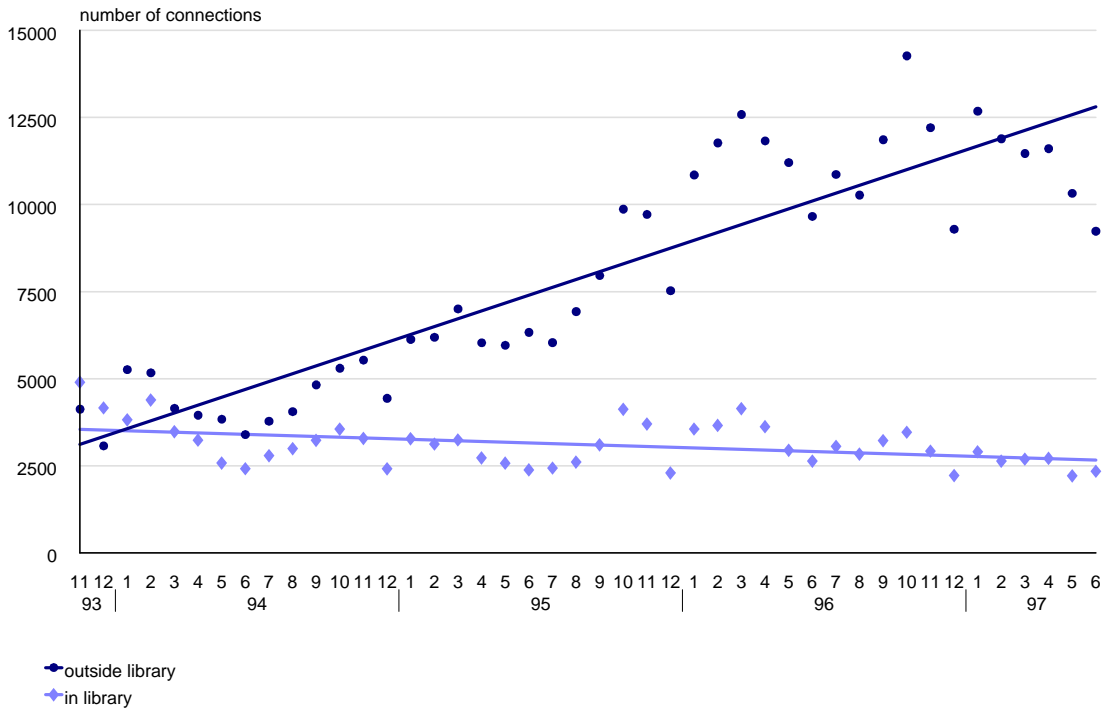
Clinical Reporting System

number of accesses per month

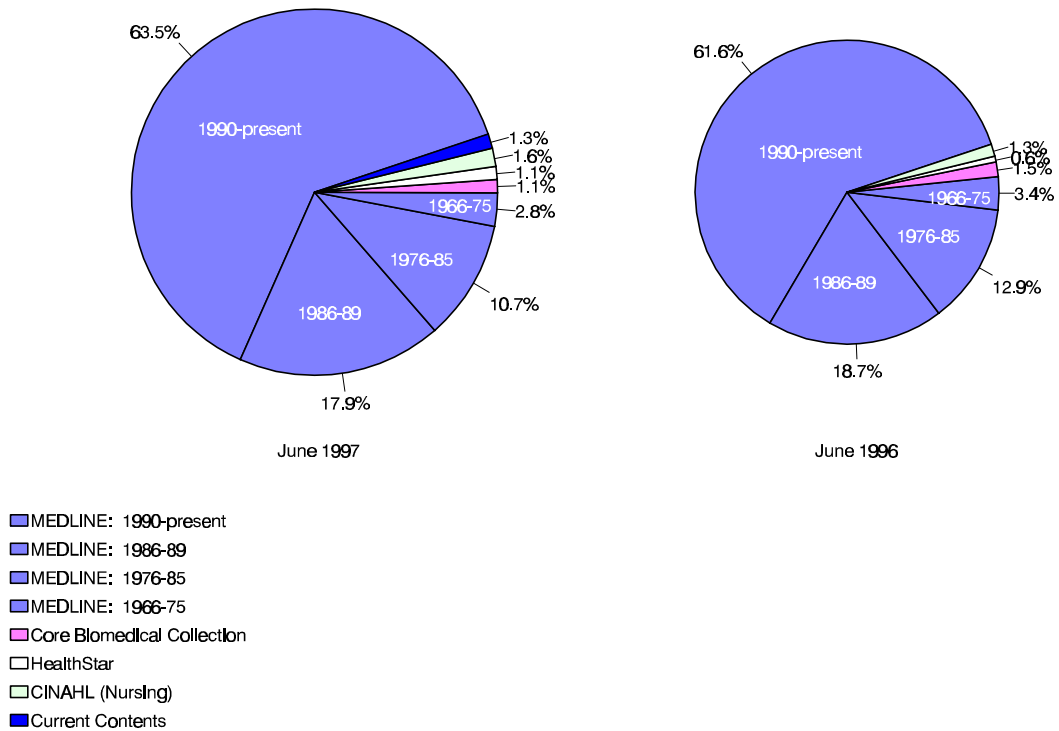


OVID usage

OVID usage over time
includes MEDLINE, CINAHL, HealthStar, and Core Biomedical Collection



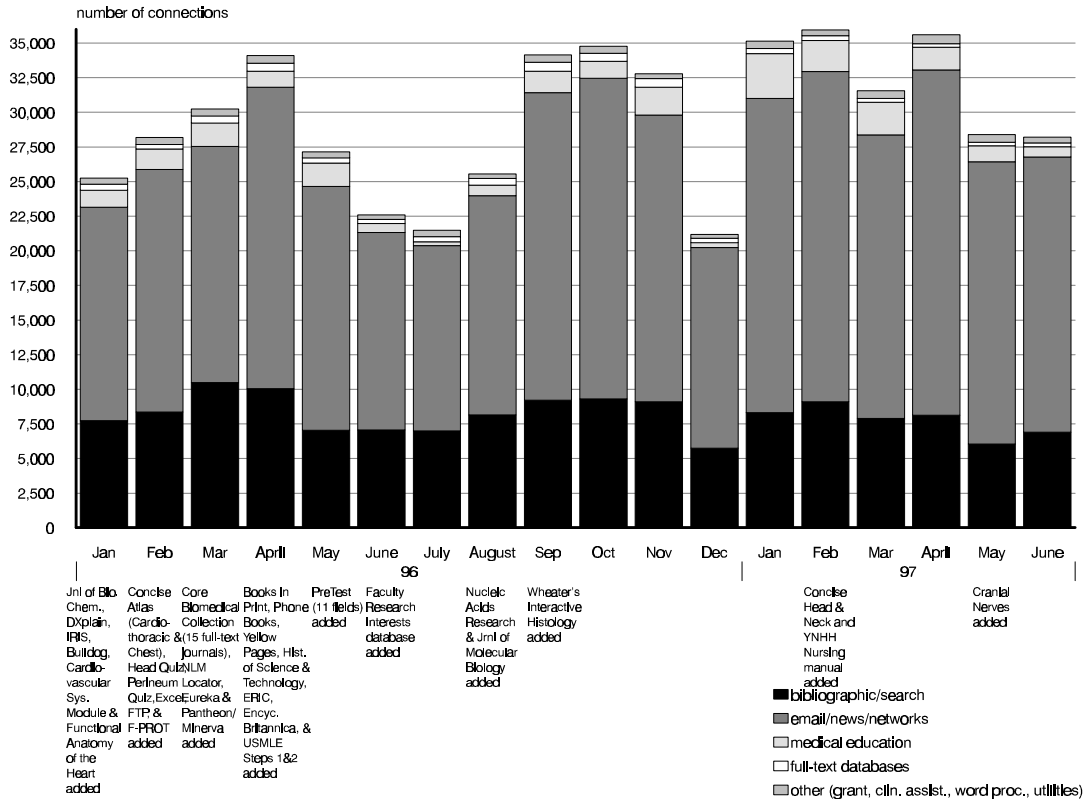
OVID usage
Breakdown of databases



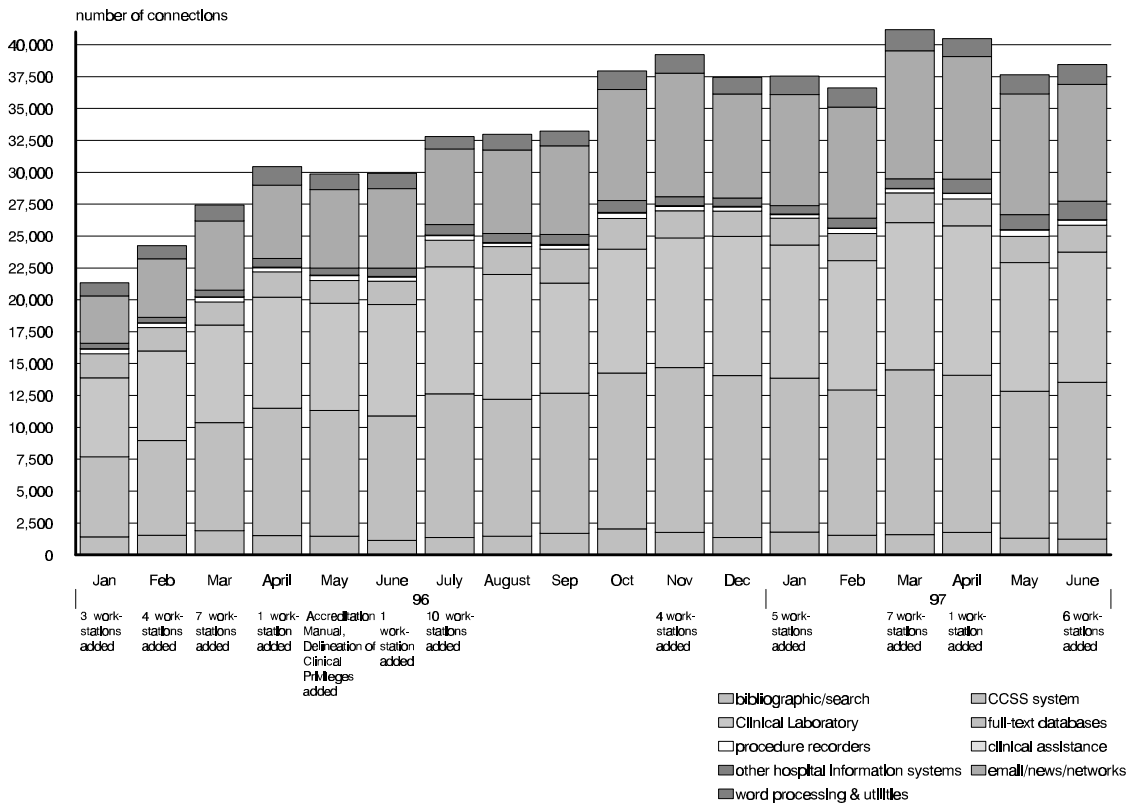
Difference in size of pies reflects difference in amount of usage.

NetMenu workstation usage

NetMenu in the Medical Library



NetMenu in the Hospital



Overall usage for selected databases

	<u>Jun-96</u>	<u>Jul-96</u>	<u>Aug-96</u>	<u>Sep-96</u>	<u>Oct-96</u>	<u>Nov-96</u>	<u>Dec-96</u>	<u>Jan-97</u>	<u>Feb-97</u>	<u>Mar-97</u>	<u>Apr-97</u>	<u>May-97</u>	<u>Jun-97</u>
Summary													
Current Contents*	454	491	2167*	1534*	2331*	1798*	2,937	4,489	3,886	3,931	3,165	3,922	3,173
MEDLINE	12,549	14,114	13,163	15,035	17,947	16,825	13,296	18,307	17,329	17,053	18,577	16,467	15,948
Medical Center Web server	213,995	243,844	223,670	240,165	303,126	372,135	347,928	431,339	459,226	543,310	623,284	654,313	604,198
Electronic mail messages sent	315,220	309,517	364,477	322,377	456,571	492,880	422,342	621,590	595,748	564,961	572,553	464,333	364,215
Clinical Reporting System (CR)	485	593	425	434	548	392	348	633	742	572	730	620	551

Details: OVID

1966-75 search sets	4,314	4,447	5,243	5,101	4,805	5,091	3,823	5,349	5,818	5,752	5,530	5,545	4,678
1976-85 search sets	16,462	20,241	19,270	20,888	19,234	18,694	15,755	20,618	21,255	22,001	21,843	22,084	17,707
1986-89 search sets	23,762	30,139	27,276	30,458	29,425	27,587	23,185	31,520	29,664	30,687	29,999	30,913	29,454
1990-present search sets	78,495	90,799	79,185	100,386	106,766	96,388	76,264	102,575	105,377	96,592	99,365	107,291	104,569
Core Biomedical Collection search sets	1,922	3,725	2,351	2,520	2,043	1,870	1,912	2,197	1,841	1,960	2,152	1,737	1,818
HealthStar search sets	815	946	1,077	2,488	3,945	3,709	2,129	2,301	4,321	2,247	3,502	2,843	1,825
nursing search sets	1,612	1,541	1,075	2,828	3,795	3,543	1,972	2,904	3,645	2,703	3,175	2,740	2,596
access method: telnet sessions	-	-	-	-	-	-	11,725	15,781	14,668	13,785	14,558	12,716	11,825
access method: Web sessions	-	-	-	-	-	-	1,381	2,325	2,231	2,900	3,672	3,471	3,847
access method: Z39.50	-	-	-	-	-	-		215	434	363	323	284	280

Details: Current Contents

Current Contents total*	454	491	2,167	1,534	2,331	1,798	2,937	4,489	3,886	3,931	3,165	3,922	3,173
Ovid version	-	-	-	-	-	-	1,633	2,413	2,181	2,227	2,372	2,410	2,082
Basis version, interactive session	-	-	-	-	-	-	196	289	229	221	37	0	0
Basis version, automatic searches	-	-	-	-	-	-	1,108	1,787	1,476	1,483	756	1,512	1,091

*Current Contents usage includes automatic searches as of 8/96 and Ovid access as of 12/96

Medical Center Web usage report, June 1997

Top 10 pages accessed by Yale users

<u>this year</u>	<u>last year</u>
Medical Center	Medical Center
Medical Library	Medical Library
School of Medicine	MedMenu
MedMenu	Server search
Medical Library's Internet search page	School of Medicine
Desktop Support	Desktop Support
Server search	Medical Library's Internet search page
MedMenu's informational page about OVID	MedMenu's alphabetical list of resources
Scientific Affairs and Grant & Contract Administration	Academic departments page
Medical Library's other Yale sites page	Other Yale & New Haven area Web sites page

	<u>Jun-97</u>	<u>Jun-96</u>	<u>% change</u>
Server total	604,198	213,995	182%
Who connected			
Yale	124,630	31,991	290%
other US educational institutions	63,766	37,703	69%
US government & military	7,215	3,605	100%
US commercial institutions	133,602	44,875	198%
US non-profit organizations	8,377	2,064	306%
Major online service providers	67,401	19,705	242%
International	89,238	32,841	172%
# of unique hosts connecting	62,885	31,955	97%
Medical Center	43,881	6,703	555%
Yale-New Haven Hospital	1,662	675	146%
School of Medicine	9,349	3,442	172%
School of Nursing	743	332	124%
Major resources			
School's organizational chart	46	102	-55%
Computing page	509	202	152%
Core research facilities page	183	120	53%
Education page	201	311	-35%
Emerging Infections Information Network	2,167	843	157%
Medical Library	14,102	5,917	138%
MedMenu	4314	862	400%
Scientific Affairs and Grant & Contract Ad	1,189	278	328%
School of Medicine application	1086*	968	-12%
Yale Faculty Practice	498	-	-
Service departments			
Academic Computing	79	62	27%
Biomedical Communications	402	386	4%
C/AIM	4,883	3,672	33%
Center for Cell Imaging	353	170	108%
Copy Center	72	-	-
Desktop Support	1517	82	1750%
Systems Support	172	-	-
Technology Operations	204	-	-

*The application was converted to an Oracle-based application on a new server this month.
The number reported for May is the number of unique users who registered for applications.

Top 10 pages accessed by external users

<u>this year</u>	<u>last year</u>
Center for Advanced Instructional Media	Center for Advanced Instructional M
School of Medicine	Server search
Medical Center page	School of Medicine
School of Medicine's admissions viewbook	Medical Center page
Server search	Medical Library
Medical Library	School of Medicine's admissions viewbook
Academic departments page	Child Study Center's Autism/PDD Clinic
Child Study Center's Autism/PDD Clinic	Yale Journal of Biology and Medicine
Yale-New Haven Hospital	Academic departments page
Epidemiology & Public Health	MedMenu

	<u>Jun-97</u>	<u>Jun-96</u>	<u>% change</u>
Academic Departments**			
Anesthesiology	429	181	137%
BBS	404	-	-
Boyer Center for Molecular Medicine	658	231	185%
Cancer Center	546	257	112%
Cell Biology	589	247	138%
Cellular & Molecular Physiology	263	119	121%
Child Study Center	537	-	-
Comparative Medicine	96	27	256%
Dermatology	496	326	52%
Diagnostic Radiology	540	204	165%
Epidemiology & Public Health	1709	789	117%
Genetics	497	192	159%
History of Medicine	107	73	47%
Immunobiology	295	-	-
Internal Medicine	328	163	101%
Laboratory Medicine	436	43	914%
Neurobiology	480	298	61%
Neurology	426	151	182%
Neuroscience Program	196	62	-
Neurosurgery	110	-	-
Obstetrics & Gynecology	247	134	84%
Ophthalmology	511	346	48%
Orthopaedics & Rehabilitation	200	46	-
Pathology	674	303	122%
Pediatrics	295	-	-
Pharmacology	296	117	153%
Physician Associate Program	450	-	-
Psychiatry	801	458	75%
Surgery	284	130	118%
Therapeutic Radiology	87	-	-

**Molecular Biochemistry & Biophysics and the Center for Medical Informatics are not listed because they reside on other servers.

Details for NetMenu Hospital usage

<u>Application</u>	<u>total # of connections</u>		
	<u>Jun-97</u>	<u>Jun-96</u>	<u>% change</u>
Hospital information systems	23956	19172	25%
CCSS	12288	9776	26%
ChartView	582	187	211%
Clinical laboratory	10218	8740	17%
Diagnostic Imaging	191	122	57%
EPIC	503	246	104%
Surgical Pathology	174	101	72%
Bibliographic databases and search tools	1244	1128	10%
CINAHL	80	72	11%
Health Planning and Administration	41	41	0%
MEDLINE	1068	944	13%
Yale Library Catalog (OPAC)	55	71	-23%
Word processing & utilities	1546	1193	30%
Clinical Workstation locations	52	77	-32%
Format disk	45	53	-15%
Virus scan	32	42	-24%
Wordperfect	1417	1021	39%
Clinical assistance	36	55	-35%
Coag Advisor	36	55	-35%

<u>Application</u>	<u>total # of connections</u>		
	<u>Jun-97</u>	<u>Jun-96</u>	<u>% change</u>
Full text and factual databases	2098	1825	15%
Delineation of Clinical Privileges	32	30	-
Harrison's	342	372	-8%
JCAHO Accreditation Manual	17	21	-
Little Brown Handbooks	187	243	-23%
Merck Manual	78	109	-28%
Micromedex	1071	564	90%
New England Journal of Medicine	165	164	1%
Red Book on Pediatric Infections	37	29	28%
Rosen's Emergency Medicine	52	75	-31%
STAT!-Reference	66	151	-56%
YNHH Physician Phone Book	51	67	-24%
Email/news/networks	9173	6228	47%
Biomed Email	831	687	21%
GroupWise Email	1814	678	168%
Internet access	6528	4863	34%
Procedure recorders	402	322	25%
ED	35	-	-
Medicine	87	89	-2%
Ob/Gyn	163	139	17%
Surgery	117	94	24%

Details for NetMenu Medical Library usage

Application	total # of connections			Application	total # of connections			Application	total # of connections		
	Jun-97	Jun-96	% change		Jun-97	Jun-96	% change		Jun-97	Jun-96	% change
Bibliographic databases and search tools	6908	7071	-2%	Full text and factual databases	276	298	-7%	Breath sounds	9	5	80%
AIDSLINE	13	19	-32%	Academic Press Journals	11	-	-	Cardiac Angio	5	9	-44%
Biosis	24	65	-63%	American Journal of Medicine	17	10	70%	Cardiac Auscultation	24	6	300%
Books in Print	9	21	-57%	American Journal of Obstetrics	1	-	-	Cardiac Echo	4	6	-33%
CINAHL	28	4	600%	American Journal of Surgery	2	6	-67%	Cardiac MRI	6	9	-33%
Current Contents	33	115	-71%	Annals of Internal Medicine	3	4	-25%	Cardiac Perfusion Imaging: SP	0	0	#DIV/0!
ERIC	5	1	400%	Archives of General Psychiatry	5	2	150%	Cardiac Perfusion Imaging: PI	1	3	-67%
Eureka	13	7	86%	BMJ	2	6	-67%	Cardiothoracic Image Quiz	16	8	100%
Expanded Academic Index	7	11	-36%	Britannica Online	9	0	#DIV/0!	Cardiothoracic Imaging	20	16	25%
Health Planning and Administration	12	9	33%	Canadian Medical Association Journal	0	1	-	Concise Atlas - Cardiothoracic	7	2	250%
InfoFinder	95	178	-47%	Circulation	1	3	-67%	Concise Atlas - Chest	5	2	150%
MEDLINE	4314	4226	2%	Electronic Journals	8	-	-	Concise Atlas - Extremities	13	-	-
PsycINFO	163	103	58%	Faculty Research Interests database	10	8	-	Concise Atlas - Head & Neck	1	-	-
Science Citation Index	137	120	14%	FREIDA	35	76	-54%	Cranial Nerves	12	-	-
Search term lookup	3	7	-57%	GenBank	7	8	-13%	Embryo images	36	20	80%
Yale Library Catalog (OPAC)	2052	2182	-6%	History of Science & Technology	10	2	400%	EPS Review	8	11	-27%
Email/news/networks	19874	14264	39%	Journal of Biological Chemistry	9	6	50%	Extremities Quiz	12	9	33%
Biomed Email	7805	7131	9%	Journal of Bone & Joint Surgery	1	1	0%	Forebrain (Syracuse)	0	0	#DIV/0!
Bulldog Access	79	78	1%	Journal of Clinical Investigation	0	2	-100%	Gross Anatomy Review	25	35	-29%
Pantheon/Minerva	3195	474	574%	Journal of Molecular Biology	5	-	-	HARP (Histological Anatomy Review	11	7	57%
World Wide Web	8762	6551	34%	JAMA	6	5	20%	Head and Neuroanatomy Quiz	12	-	#####
YaleInfo	33	0	-	Lancet	4	3	33%	Head Quiz	15	8	88%
word processing & utilities (CRL)	401	268	50%	Legislate	0	0	#DIV/0!	Histology Quizbank	11	7	57%
Epi Info	1	6	-83%	Micromedex	2	1	100%	Histology Video Review	10	8	25%
Excel for Windows	22	17	29%	MMWR	1	8	-88%	HyperCELL	5	4	25%
Format disk	10	11	-9%	Network Entrez	12	6	100%	Hyperheart	5	7	-29%
FTP for Windows	17	0	-	New England Journal of Medicine	14	6	133%	Interactive Brain Atlas	3	4	-25%
Health Risk Appraisal	0	2	-100%	NEXIS	48	78	-38%	Interactive Respiratory Physiology	2	0	#DIV/0!
Virus Scanner (F-PROT)	9	8	13%	Nucleic Acids Research	6	-	-	KINEMAGE	2	2	0%
Wordperfect for Windows	342	224	53%	OMIM/GDB	3	1	200%	Lazy Eye	3	7	-57%
Grant and research information	9	29	-69%	Pediatrics	5	10	-50%	MacBaby	5	8	-38%
Annual grant deadlines	2	-	-	Phone Books	17	19	-11%	Microbiology Quizbank	34	22	55%
Community of Science	2	-	-	Science	19	16	19%	Neuroanatomy Review	9	13	-31%
CT CRISP	1	15	-93%	Scientific American Medicine Consult	2	7	-71%	Neuron Model: Tutorial	0	3	-100%
IRIS	4	0	-	YNHH Nursing Organization and Practic	1	-	-	Neuron Model: Current Clamp	0	2	-100%
Clinical assistance	1	18	-94%	Medical Education	741	644	15%	Neuron Model: Voltage Clamp	1	1	0%
Coag Advisor	0	4	-100%	Abdomen Quiz	50	22	127%	Pathology Quizbank	79	203	-61%
Physician Data Query (PDQ)	1	13	-92%	Anatomic Explorer	28	17	65%	Perineum Quiz	8	10	-20%
				Anatomic Explorer CT	14	7	100%	PreTest (11 different fields)	13	38	-66%
				Animated Embryo	20	20	0%	Superhead	6	5	20%
				Brainstem	4	11	-64%	Thorax Quiz	16	8	100%
				Brainstem Quiz	17	-	-	USMLE Step 1	106	28	279%
				Brainstorm	15	10	50%	USMLE Step 2	31	18	72%
								Wheater's Interactive Histology	2	-	-